Aerial Radiological Survey for King and Pierce Counties

Frequently Asked Questions

A helicopter flying over some urban areas of King and Pierce counties will gather radiological readings July 11-28, 2011. The U.S. Department of Energy's Remote Sensing Laboratory Aerial Measurement System will collect baseline levels of radioactive materials. The helicopter's equipment can detect the presence of radioactive materials that emit gamma radiation such as cesium and radioactive iodine. The baseline would be used in the event of a radiation emergency to compare radioactive contamination to the normal levels found during this study. The Washington State Department of Health Office of Radiation Protection is overseeing the project, which is funded by the U.S. Department of Homeland Security.

Photo of the Bell Helicopter that will perform the aerial survey.

The helicopter will fly a grid pattern spaced about 600 feet apart at an altitude of 300 feet, flying at 70 mph. The results will be provided to local agencies from the surveyed area by year-end. Some of the data may be withheld for national security purposes. The state Department of Health has been planning this project since 2009.

Why is there a helicopter flying low over my neighborhood?

The state Department of Health asked for federal support to measure the background levels of radiation in sections of King and Pierce counties. This information will give us a radiation baseline. The low altitude provides a more accurate measurement of background radiation.

What is a radiological or radiation baseline and why is it needed?

A radiation baseline tells us how much background radiation is currently found in an area. This baseline would be used to compare against measurements taken after a radiation emergency occurs. It helps state and local officials quickly determine where potential health effects may exist and to warn people in the affected area.

What kind of radioactive material do you expect to find, and what are the sources?

We expect to detect natural radioactive material. We may also find evidence that licensed radioactive material users are doing work in approved locations such as medical centers and road construction. If we find radiation levels above expected background, or that are not from our approved licensees, we'll investigate the source of the radiation. The investigative team consists of federal, state, and local response personnel.

Are you doing the survey to find out how much radioactive material came from Japan?

This project is looking for radioactive material that exists in our environment. The survey isn't focused on radioactive material from Japan. The amount of material from Japan was extremely low and will not be detected by equipment on the helicopter.

Did the nuclear reactor damage in Japan lead to this project?

This project isn't related to the disaster in Japan. It began in September 2009, well before the earthquake in Fukushima. The helicopter flyover is part of a multi-phase project to improve our state readiness to respond to radiation emergencies.

Are you going to provide the survey results, and if so, how?

The survey results will be provided after all the reports have been completed and the quality of the information has been verified. The Department of Health will work with the agencies that are part of the survey to determine how the results will be shared.

What kind of radiation does the helicopter detect?

The helicopter detects gamma radiation. This type of radiation can travel the distance between the ground and the helicopter, so it's easy to detect during a flyover.

Is there radiation you cannot detect?

We will not be able to detect beta or alpha radiation on the ground. The distance between the helicopter and the ground is too great to be able to measure these types of radiation from the air.

If you find something that can cause health problems, will you tell us, and if so, how?

We will tell the public if we find radioactive material that can cause health problems. The notification would be sent to the news media, and posted on the websites of state and local health and emergency management agencies.

Who is responsible for the flyover?

The state Department of Health has been working with local emergency management and public health officials to coordinate the project. The state Department of Health is responsible for assuring that the survey is completed properly.

Who is paying for the flyover?

The flyover is funded by a U.S. Department of Homeland Security grant.

If you find a lot of radiation in a location, will it be cleaned up?

We do not expect to see any areas emitting harmful levels of radiation. If we do find areas that may be harmful, action will be taken to protect the public. Environmental cleanup decisions and activities are made in coordination with the state Department of Ecology, the U.S. Environmental Protection Agency, and local officials.

Are you going to fly over the entire state, and if not, why not?
We're flying over sections of King and Pierce counties using federal money designated for use in these areas. To expand the area surveyed, more funding would be needed.

Why aren't you flying over the Hanford Nuclear Reservation?

The U.S. Department of Energy already has data for the Hanford Nuclear Reservation so there's no need to duplicate that work.

Contact Information

- Questions or comments can be sent to the Washington State Department of Health.
- Contact the Office of Radiation Protection at 360-236-3300.
- For information on the U.S. Department of Energy's Remote Sensing Laboratory Aerial Measuring System call 702-295-1755.